

Amendments to the Specification:

- 1.) Please replace the paragraph beginning at page 11, line 8, with the following rewritten paragraph:

Figure 1 illustrates various network components for the communication of multimedia data in accordance with exemplary embodiments of the present invention. The network includes a server 110, a gateway 120 and client ~~430~~ 135. Server 110 stores multimedia data, along with transcoding hints, in multimedia storage element 113. Server 110 communicates the multimedia data and the transcoder hints to gateway 120 via bidirectional communication link 115. Gateway 120 includes a transcoder 125. Transcoder 125 reformats the multimedia data using the transcoder hints based upon client capabilities, user preferences, link characteristics and/or network characteristics. The transcoded multimedia data is provided to client 135 via bidirectional communication link 130. It will be recognized that bidirectional communication links 115 and 130 can be any type of bidirectional communication links, i.e., wireless or wire line communication links. Further, it will be recognized that the gateway can reside in the server 110 or in the client 135. In addition, the server 110 can be a part of another client, e.g., the server 110 can be a hard disk drive inside another client.

- 2.) Please replace the paragraph beginning at page 18, line 20, with the following rewritten paragraph:

One issue with motion vector refinement is the prediction of the motion vector value. When transcoding from CIF to QCIF, four motion vectors on the CIF resolution need to be replaced by one in the QCIF resolution. Figure 7 illustrates this process 720. Accordingly, the transcoder combines the four incoming motion vectors 711, 712, 713 and 714 in such a manner that it can produce one motion vector 770 per macroblock during the re-encoding process. The predicted motion vector, which can be refined later, is a scaled version of the medium, mean, average or random selection of one of

the motion vectors of the four motion vectors of the CIF information. The transcoding hints can also inform the transcoder of the form of prediction to be used.

3.) Please replace the paragraph beginning at page 19, line 13, with the following rewritten paragraph:

When resolution reduction is implemented in a transcoder, a problem results with passing motion vectors appearing in passing macroblock type information. Although the macroblock coding types can be reevaluated at the encoder of the transcoder, a quicker method can be used to speed up the computation using the process 800 represented in Figure 8. The down sampling of four macroblock types to one macroblock 820. The four macroblock types 810 include an inter macroblock 811, skip macroblocks 812 and 813, and an intra block 814. If there is at least one intra block in the 16 x 16 macroblocks of the CIF encoded video, then the code of the corresponding macroblock in QCIF is intra. If all macroblocks were coded as skipped, then these macroblocks are also coded as skipped. If there was no intra macroblock but there was at least one inter macroblock, then the macroblock is coded in QCIF as inter. In addition, if there are no intra macroblocks but at least one inter macroblock, a further check is performed to determine if all coefficients after quantization are set to zero. If all coefficients after quantization are set to zero then the macroblock is coded as skipped.